

ISO/IEC JTC 1/SC 29 "Coding of audio, picture, multimedia and hypermedia information"

Secretariat: JISC

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Liaison statement from SC 29/WG 3 to 3GPP on MPEG-I Scene Description [SC 29/WG 3 N 919]

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Description

In accordance with Recommendation 9.1.1 at the 11th WG 3 Meeting, 2023-04-24/28, Antalya, Türkiye, the SC 29 Secretariat sends this liaison statement to 3GPP. [Requested action: For SC 29's information]

ISO/IEC JTC 1/SC 29/WG 03

MPEG Systems

Convenorship: KATS (Korea, Republic of)

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**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
ISO/IEC JTC 1/SC 29/WG 03 MPEG SYSTEMS**

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To 3GPP SA4
Title Liaison to 3GPP SA4 on MPEG-I Scene Description
Source WG 03, MPEG Systems
SN 22687

ISO/IEC JTC 1/SC 29/WG 3 (MPEG Systems) would like to inform 3GPP SA4 about completed work and ongoing efforts related to MPEG-I Scene Description as specified in ISO/IEC 23090-14 which primarily defines extensions to Khronos' glTF2.0 specification to support real-time media. The first edition of the standard was technically completed in summer 2022 and will be published shortly.

ISO/IEC 23090-14 provides a set of vendor-extensions to glTF2.0 under the MPEG_ prefix to [Khronos glTF](#) as well as extensions to the MPEG-defined file format. These extensions enable description and delivery of timed immersive media into glTF-based immersive scenes. Furthermore, the standard defines an architecture together with an application programming interface (API) that allows the application to separate the access to the immersive timed media content from the rendering of this media. The separation and the definition of this API allow integration of different transport and delivery functions into a rich 3D scene experience, usable for different applications including Virtual, Mixed, Extended and Augmented Reality.

A detailed overview of supported functions in MPEG-I Scene Description is provided in the MPEG White Paper [here](#).

We specifically inform you on our ongoing work in Amendment 1 (available in WG03N0859) and Amendment 2 (available in WG03N0861) of ISO/IEC 23090-14. The candidate extensions for the second edition include support for new MPEG codecs related to point cloud coding and immersive video, haptics, AR anchoring, user representation and avatars, interactivity, immersive audio and lighting. We believe that some of the extensions may be of specific interest for ongoing work in 3GPP and would invite for comments and feedback to address potential needs, possibly

using our public github [here](#).

We are also progressing our work on test assets as well as conformance and reference software. Details are documented in WG03N0907 and WG03N0908. If you have interest to access these test assets, please contact the software and test asset coordinators listed in WG03N0848.

We invite you to provide your views and comments on the above MPEG-I Scene Description documents in terms of applicability, extensibility and use cases that you consider important and would be complementary to your ongoing work.

Our meeting schedule can be found at <https://www.mpegstandards.org/meetings/>